

IN THE CLAIMS:

1. (previously presented) A computer implemented method for grouping assets included within a portfolio of assets for valuation purposes using a classification and regression tree based model, said method comprising the steps of:

receiving from a seller a proposal to sell a portfolio of assets, the assets included within at least one segment defined by the seller;

computing sum of squared error (SSE) values for the at least one defined portfolio segment using the classification and regression tree based model and the computer, wherein the classification and regression tree based model generates at least one cluster of assets included within the portfolio of assets for valuing each non-underwritten asset included within the at least one cluster, each non-underwritten asset included within the at least one cluster is assigned a value based on an average value assigned to underwritten assets included within the at least one cluster;

computing SSE values for the at least one defined portfolio segment using a simple model and the computer, wherein the simple model assigns a single value to all non-underwritten assets within the at least one defined portfolio segment based on a value assigned to at least one underwritten asset included within the at least one defined portfolio segment;

computing an error ratio between the SSE values based on the classification and regression tree based model and the SSE values based on the simple model for the at least one defined portfolio segment using the computer;

ranking the at least one defined portfolio segment based on the computed error ratio; and

using the ranking by a potential buyer to determine an amount to offer for purchasing assets included within the at least one defined portfolio segment.

2. (previously presented) A method according to Claim 1 wherein said step of receiving from a seller a proposal to sell a portfolio of assets, the assets included within at least one segment defined by the seller, further comprises receiving at least one defined portfolio segment that is defined by the seller based upon at least one of pre-defined tranches, unpaid balance amounts, region customer risk and loan rankings.

3. (canceled)

4. (canceled)

5. (canceled)

6. (previously presented) A method according to Claim 1 further comprising the step of using the classification and regression tree based model as a predictor for the at least one defined portfolio segment if the computed error ratio for at least one defined portfolio segment is less than one.

7. (previously presented) A method according to Claim 1 wherein the at least one defined portfolio segment is a plurality of defined portfolio segments, said method further comprising computing coefficient of determination (R^2) values for each asset within each defined portfolio segment, where R^2 per asset is computed as (sum of squares total (SST) per segment - SSE per segment)/(overall SST for all assets within the portfolio \times number of assets within each segment).

8. (canceled)

9. (previously presented) A method according to Claim 1 further comprising ranking the at least one defined portfolio segment based upon a coefficient of determination (R^2) value computed for the at least one defined portfolio segment, where $R^2 = 1 - (\text{SSE} / \text{sum of squares total (SST)})$.

10. (canceled)

11. (previously presented) A system for grouping assets included within a portfolio of assets for valuation purposes using a classification and regression tree based model, said system comprising:

a computer configured as a server and a database of asset portfolios; and

at least one client system connected to said server through a network, said server configured to:

receive from a seller a proposal to sell a portfolio of assets, the assets included within at least one segment defined by the seller;

compute sum of squared error (SSE) values for the at least one defined portfolio segment using the classification and regression tree based model, wherein the classification and regression tree based model generates at least one cluster of assets included within the portfolio of assets for valuing each non-underwritten asset included with the at least one cluster, each non-underwritten asset included within the at least one cluster is assigned a value based on an average value assigned to underwritten assets included within the at least one cluster;

compute SSE values for the at least one defined portfolio segment using a simple model, wherein the simple model assigns a single value to all non-underwritten assets within the at least one defined portfolio segment based on a value assigned to at least one underwritten asset included within the at least one defined portfolio segment;

compute an error ratio between the SSE values based on the classification and regression tree based model and the SSE values based on the simple model for the at least one defined portfolio segment;

rank the at least one defined portfolio segment based on the computed error ratio; and

determine an amount to offer by a potential buyer for purchasing assets included within the at least one defined portfolio segment based on the ranking.

12. (previously presented) A system according to Claim 11 wherein the at least one defined portfolio segment is defined by the seller based upon at least one of pre-defined tranches, unpaid balance amounts, region customer risk and asset rankings.

13. (canceled)

14. (canceled)

15. (canceled)

16. (previously presented) A system according to Claim 11 wherein said server is configured to use the classification and regression tree based model as a predictor for the at least one defined portfolio segment if the computed error ratio for the at least one defined portfolio segment is less than one.

17. (previously presented) A system according to Claim 11 wherein the at least one defined portfolio segment is a plurality of defined portfolio segments, said server configured to compute determination of coefficient (R^2) values for each asset within each defined portfolio segment, where R^2 per asset is computed as (sum of squares total (SST) per segment - SSE per segment)/(overall SST for all assets \times number of assets within each segment).

18. (canceled)

19. (previously presented) A system according to Claim 11 wherein said server is configured to rank the at least one defined portfolio segment based upon a coefficient of determination (R^2) value computed for the at least one defined portfolio segment, where $R^2 = 1 - (SSE / \text{sum of squares total (SST)})$.

20. (canceled)

21. (previously presented) A computer configured for grouping assets included within a portfolio of assets for valuation purposes using a classification and regression tree based model, said computer including a database of portfolios of assets, said computer programmed to:

receive from a seller a proposal to sell a portfolio of assets, the assets included within at least one segment defined by the seller;

compute sum of squared error (SSE) values for the at least one defined portfolio segment using the classification and regression tree based model, wherein the classification and regression tree based model generates at least one cluster of assets included within the portfolio of assets for valuing each non-underwritten asset included within the at least one cluster, each non-underwritten asset included within the at least one cluster is assigned a value based on an average value assigned to underwritten assets included within the at least one cluster;

compute SSE values for the at least one defined portfolio segment using a simple model, wherein the simple model assigns a single value to all non-underwritten assets within the at least one defined portfolio segment based on a value assigned to at least one underwritten asset included within the at least one defined portfolio segment;

compute an error ratio between the SSE values based on the classification and regression tree based model and the SSE values based on the simple model for the at least one defined portfolio segment;

rank the at least one defined portfolio segment based on the computed error ratio; and

determine an amount to offer by a potential buyer for purchasing assets included within the at least one defined portfolio segment based on the ranking.

22. (previously presented) A computer according to Claim 21 wherein the at least one defined portfolio segment is defined by the seller based upon at least one of pre-defined tranches, unpaid balance amounts, region customer risk and asset rankings.

23. (canceled)

24. (canceled)

25. (canceled)

26. (previously presented) A computer according to Claim 21 programmed to use the classification and regression tree based model as a predictor for the at least one defined portfolio segment if the computed error ratio for the at least one defined portfolio segment is less than one.

27. (previously presented) A computer according to Claim 21 wherein the at least one defined portfolio segment is a plurality of defined portfolio segments, said computer programmed to compute determination of coefficient (R^2) values for each asset within each defined portfolio segment, where R^2 per asset is computed as (sum of squares total (SST) per segment - SSE per segment)/(overall SST for all assets \times number of assets within each segment).

28. (canceled)

29. (previously presented) A computer according to Claim 21 programmed to rank the at least one defined portfolio segment based upon a coefficient of determination (R^2) value for the at least one defined portfolio segment, where $R^2 = 1 - (\text{SSE} / \text{sum of squares total (SST)})$.

30. (canceled)

31. (currently amended) A method according to Claim 1 wherein the at least one defined portfolio segment is a plurality of defined portfolio segments, said method further comprising using a hybrid model as a predictor by:

using the classification and regression tree based model as a predictor for a first portfolio segment of the plurality of defined portfolio segments; and

using the simple model as a predictor for a second portfolio segment of the plurality of defined portfolio segments.

32. (previously presented) A method according to Claim 7 further comprising ranking portfolio segments of the plurality of defined portfolio segments based on the computed R^2 values.

33. (currently amended) A method according to Claim 7 further comprising ~~using a hybrid model as a predictor by:~~

using at least one of the classification and regression tree based model and the simple model as a predictor for a first portfolio segment of the plurality of defined portfolio segments; and

using a computed R^2 value of a second portfolio segment of the plurality of defined portfolio segments as a predictor for the second portfolio segment.

34. (currently amended) A system according to Claim 11 wherein the at least one defined portfolio segment is a plurality of defined portfolio segments, said server further configured to ~~use a hybrid model as a predictor by:~~

~~using~~ use the classification and regression tree based model as a predictor for a first portfolio segment of the plurality of defined portfolio segments; and

~~using~~ use the simple model as a predictor for a second portfolio segment of the plurality of defined portfolio segments.

35. (previously presented) A system according to Claim 17 wherein said server is further configured to rank portfolio segments of the plurality of defined portfolio segments based on the computed R^2 values.

36. (currently amended) A system according to Claim 17 wherein said server is further configured to ~~use a hybrid model as a predictor by:~~

~~using~~ use at least one of the classification and regression tree based model and the simple model as a predictor for a first portfolio segment of the plurality of defined portfolio segments; and

~~using~~ use a computed R^2 value of a second portfolio segment of the plurality of defined portfolio segments as a predictor for the second portfolio segment.

37. (currently amended) A computer according to Claim 21 wherein the at least one defined portfolio segment is a plurality of defined portfolio segments, said computer further programmed to ~~use a hybrid model as a predictor by:~~

~~using~~ use the classification and regression tree based model as a predictor for a first portfolio segment of the plurality of defined portfolio segments; and

~~using~~ use the simple model as a predictor for a second portfolio segment of the plurality of defined portfolio segments.

38. (previously presented) A computer according to Claim 27 wherein said computer is further programmed to rank portfolio segments of the plurality of defined portfolio segments based on the computed R^2 values.

39. (currently amended) A computer according to Claim 27 wherein said computer is further programmed to ~~use a hybrid model as a predictor by:~~

~~using~~ use at least one of the classification and regression tree based model and the simple model as a predictor for a first portfolio segment of the plurality of defined portfolio segments; and

~~using~~ use a computed R^2 value of a second portfolio segment of the plurality of defined portfolio segments as a predictor for the second portfolio segment.

40. (previously presented) A method according to Claim 1 wherein the simple model assigns a single value to all non-underwritten assets within the at least one defined portfolio segment based on at least one of an average value, a median value, a highest value, and a lowest value of the underwritten assets within the at least one defined portfolio segment.

41. (previously presented) A method according to Claim 1 wherein the simple model assigns a single value to all non-underwritten assets within the portfolio of assets based on a value of an underwritten asset within the portfolio of assets.

42. (previously presented) A system according to Claim 11 wherein the simple model assigns a single value to all non-underwritten assets within the at least one defined portfolio segment based on at least one of an average value, a median value, a highest value, and a lowest value of the underwritten assets within the at least one defined portfolio segment.

43. (previously presented) A system according to Claim 11 wherein the simple model assigns a single value to all non-underwritten assets within the portfolio of assets based on a value of an underwritten asset within the portfolio of assets.

44. (previously presented) A computer according to Claim 21 wherein the simple model assigns a single value to all non-underwritten assets within the at least one defined portfolio segment based on at least one of an average value, a median value, a highest value, and a lowest value of the underwritten assets within the at least one defined portfolio segment.

45. (previously presented) A computer according to Claim 21 wherein the simple model assigns a single value to all non-underwritten assets within the portfolio of assets based on a value of an underwritten asset within the portfolio of assets.